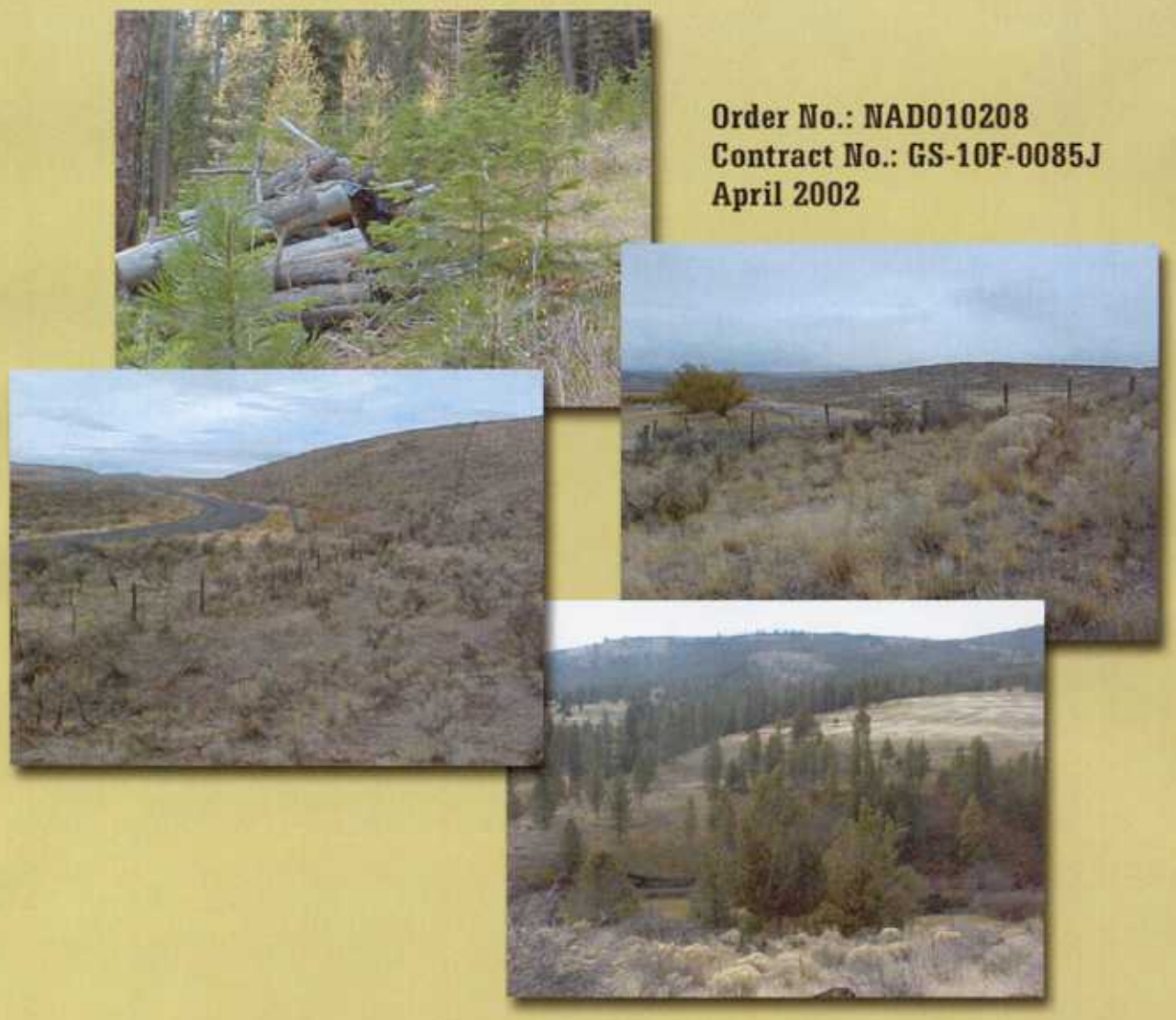
WILDLAND-URBAN INTERFACE COMMUNITIES-AT-RISK PROGRAM

Final Mitigation Recommendations
BLM Vale District
Halfway/Brownlee/Oxbow Assessment Area



Order No.: NAD010208
Contract No.: GS-10F-0085J
April 2002

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FINAL
WILDLAND-URBAN INTERFACE COMMUNITIES-AT-RISK MITIGATION RECOMMENDATIONS

VALE DISTRICT
HALFWAY, BROWNLEE AND OXBOW (HBO) ASSESSMENT AREA

Prepared for:

U.S. Department of Interior
Bureau of Land Management
Vale District
100 Oregon Street
Vale, Oregon 97918
(541) 473-3144

Prepared by:

Dynamac Corporation
20440 Century Boulevard
Suite 100
Germantown, Maryland 20874

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ACRONYM LIST

amsl	Above mean sea level
BLM	Bureau of Land Management
HBO	Halfway, Brownlee, Oxbow
GPS	Global Positioning System
MLRA	Major Land Resource Area
NAD	North American Datum
NFPA	National Fire Protection Association
NWCG	National Wildfire Coordination Group
ODF	Oregon Department of Forestry
PVR	Pine Valley Ranch
PVRFD	Pine Valley Rural Fire Department
RFD	Rural Fire Department
SOW	Statement of Work
UCP	United Community Partners
USFS	U.S. Forest Service
USGS	U.S. Geological Survey
UTM	Universal Transverse Mercator
WRCC	Western Regional Climate Center

APPENDIX A

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APPENDIX B

1.0 EXECUTIVE SUMMARY

During the 2000 fire season more than 6.8 million acres of public and private lands were burned by wildfire, resulting in loss of property, damage to resources, and disruption of community services. Many of these fires occurred in wildland-urban interface areas and exceeded fire suppression capabilities. To reduce the risk of fire in the wildland-urban interface, the President of the United States directed the Secretaries of the Departments of Agriculture and the Interior to increase federal investments in projects to reduce the risk of wildfire in the wildland-urban interface. The Bureau of Land Management (BLM), Vale District, is currently in the process of forming partnerships with local governments to plan fuels reduction treatments and other mitigation measures targeted at the wildland-urban interface in the vicinity of public lands. These partnerships are indicative of a shared responsibility to reduce wildland fire risks to communities.

The wildland-urban interface occurs where manmade structures meet or intermix with wildland vegetation. In certain situations, specific actions such as fuels reduction around communities, forest and rangeland restoration, infrastructure improvements, and public education and outreach may reduce the risk of catastrophic fire in the wildland-urban interface. To this end, the Vale District BLM implemented the Communities-at-Risk, Wildland-Urban Interface Program. The program seeks to reduce the hazard of wildland fires to communities through public outreach, the reduction or prevention of fuel build-up, and increasing the fire protection capabilities of communities. The communities of Halfway, Brownlee and Oxbow (HBO) were selected to assess the hazard of wildland fire and to identify specific actions that may reduce the risk.

Dynamac Corporation (Dynamac) was contracted to support the BLM in their assessment of wildfire risk to the HBO community in the wildland-urban interface. Dynamac scientists conducted fuel surveys by categorizing the vegetation and physiographic features of the land in the assessment area. The risk of wildland fire to homes, structures, and cultural resources on private land was also evaluated according to building materials, the presence of defensible space, road access, and the response time of the local fire department. Dynamac assessed the adequacy of the community's service infrastructure (including roads, water supplies, and fire fighting equipment) by systematic observation, and by interviewing community officials and fire prevention personnel. A community meeting was held to disseminate information about the Communities-At-Risk, Wildland-Urban Interface Program on Thursday, December 6, 2001, at the Halfway Elementary School. The meeting provided residents the opportunity to identify

resources that are of value to the community and to identify actions that have the potential to reduce the risk of wildland fire in their community. The information gathered from the fuel surveys, structural surveys, interviews, infrastructure assessments, community profile and the community meeting was integrated into two draft reports: the Hazard Assessment Report and this Mitigation Recommendations report for the Vale District, HBO Assessment Area. The information from the draft reports was presented during a second community meeting on March 7, 2002. Comments obtained from the meeting were reviewed and amended into this final report.

This Mitigation Recommendations report provides a list of all the public concerns and comments that Dynamac obtained from the community during the community meeting, and through interviews with the local officials and citizens. The public comments represent actions suggested by the community that if implemented, could greatly reduce the threat of wildland fire to an urban interface area. From the list of public comments, Dynamac evaluates those that are consistent with the scope of the Communities-at-Risk Program and presents them as proposed mitigation recommendations. The proposed mitigation recommendations for the HBO assessment area fall under three main objectives:

- Develop community education and outreach programs throughout the assessment area to encourage firewise practices;
- Expand fuels reduction programs to decrease fire risk to residential areas and environmental and economically valuable areas; and,
- Provide assistance to the rural fire departments (RFDs) in the assessment area in obtaining funding for additional equipment and training.

2.0 GOALS AND OBJECTIVES

The goals of the HBO assessment are to evaluate the hazards of wildland fire within the assessment area and identify specific mitigation recommendations to reduce those hazards through interviews and meetings with the community. The objectives are twofold: to decrease the chance of wildfire spreading from public lands onto private lands, and from private lands onto public lands. This involves significant concentration on the 'interface areas' where public and private lands meet.

3.0 BACKGROUND

Wildland fire is an integral component of many forest and rangeland ecosystems. In the conterminous United States before European settlement, an estimated 145 million acres were annually scorched by wildfire. In comparison, only about 14 million acres are currently burned annually due to increased agriculture, urbanization, habitat fragmentation, and fire suppression programs. This change from the historical fire regime to the present day has caused a shift in the native vegetation composition and structure of fire-prone ecosystems such as some forests and rangelands, resulting in a dangerously high accumulation of fuels. As a result, when wildland fires do occur, they may burn larger and hotter than those in the past and pose an increased risk to human welfare and ecological integrity.

The hazard of wildland fires is compounded by the increasing occurrence of human structures and activities in fire-prone ecosystems. The wildland-urban interface occurs where human structures meet or intermix with wildland vegetation. In certain situations, specific actions such as fuels reduction around communities, forest and rangeland restoration, infrastructure improvements, and public outreach may reduce the risk of losses to catastrophic fire in the wildland-urban interface. The Vale District BLM implemented the Communities-at Risk, Wildland-Urban Interface Program to determine what these specific actions may be, and where they are needed. The program seeks to reduce the hazard of wildland fires to communities through public education and outreach, the reduction or prevention of fuel build-up, and increasing the fire protection capabilities of communities. The HBO communities were selected to assess the threat of wildland fire and to identify specific actions that may reduce the risk of loss.

The BLM Vale District intends to use the mitigation measures identified in this document as a guide and prioritization tool in implementing the Communities-at-Risk Program. The District is committed to working with any partners (private, local government, state, and federal) in order to accomplish mutual goals and objectives identified in the recommendations. The recommendations that the District chooses to implement will go through the NEPA process and will be accomplished as funding, policy, and regulations permit.

4.0 EXISTING SITUATION

4.1 HBO Assessment Area

The HBO assessment area is located in northeastern Oregon along the Snake River, approximately 55 miles east of Baker City on State Highway 86. The assessment area is based on a 15-mile radius centered on the towns of Brownlee (also referred to as Copperfield) and Homestead, Oregon. The assessment area does not include sections east of the Snake River in Idaho and areas that overlapped into the Richland-Sparta assessment area. The assessment area occupies the following townships: T4S R48E; T5S R48E; T5S R49E; T6S R48E; T7S R45E; T7S R46E; T7S R47E; T7S R48E; T8S R45E; T8S R46E; T8S R47E; T8S R49E; T9S R46E; and T9S R47E.

Land uses in the assessment area are primarily residential, ranches, recreational, and hydroelectric power generation. Residential properties are concentrated mainly in the Halfway area, north of State Highway 86. The number of residential homes along the interface with U.S. Forest Service (USFS) land is extremely high in the areas east and north of Halfway. The number of residential homes decreases traveling east on State Highway 86, until reaching the towns of Oxbow and Brownlee.

The climate of the HBO area is characterized by warm summers with average daily high temperatures reaching 88 degrees Fahrenheit ($^{\circ}$F) in July, and an average daily summertime low of 47.7° F. Winter months are typically cold, with average monthly temperatures from December through February between 14 to 40°F. Average annual precipitation of 21.71 inches in Halfway is typically higher than surrounding areas because of the rainshadow effects from the Wallowa Mountains. Most precipitation arrives between November and February as snowfall and from March through June as rain (WRCC, 2001).

Hot dry summer winds moving west to east increase the risk of wildland fires to these communities from July to September. Structural fires in the Halfway area are handled by the Pine Valley RFD in Halfway. A mutual aid agreement exists with the Eagle Valley RFD, which protects the nearby town of Richland and vicinity, but significant areas of unprotected land exist. The Pine Valley RFD is not adequately equipped to respond to wildfires, nor does it have adequate wildland fire fighting training or experience. The area largely depends on the Pine Valley USFS Ranger Station, located just outside the town of Halfway, for wildland fire defense.

Several high-risk areas have been identified in the HBO assessment area. These include the Snake River Corridor where the villages of Brownlee, Oxbow and Homestead are located; the hills west of Halfway (West Wall); and the national forest lands north of Halfway.

The Snake River Corridor is primarily public land on both sides of the river, interspersed with partial sections of private lands and homes along the river. This area is high-risk because it is very dry, has fine dense fuels throughout the corridor, is isolated, and has difficult access from the nearest town of Halfway. Access to this area via State Highway 86, is surrounded by steep canyon walls and public lands. A wildfire along this portion of State Highway 86 could severely restrict access to the Snake River Corridor.

The hills west of Halfway are public lands managed by the BLM and USFS. Public land managed by BLM is mostly grass and shrubs, while USFS land is forested woodlands. Lightning strikes and cigarettes from careless motorists traveling on State Highway 86 could result in wildland fires along the West Wall. The area is identified as high-risk because the town of Halfway is close to the West Wall and the large number of homes along the wildland-urban interface with USFS land.

The area north of Halfway has been identified as a high-risk interface area because of the large number of reported lightning strikes, the ponderosa pine and Douglas fir trees, and the number of homes located near the urban-wildland interface.

Some risk mitigation actions are currently underway in the HBO assessment area, which include the following: tree thinning north and west of Halfway on public lands and signs posted regarding fire hazards in BLM recreation areas. Local radio announcements are used to remind residents of the necessity of keeping fuels in their yards to a minimum. In addition, the USFS conducts programs in area elementary schools that aim to educate children about fire's natural role in the ecosystem as well as the dangers of wildland fire.

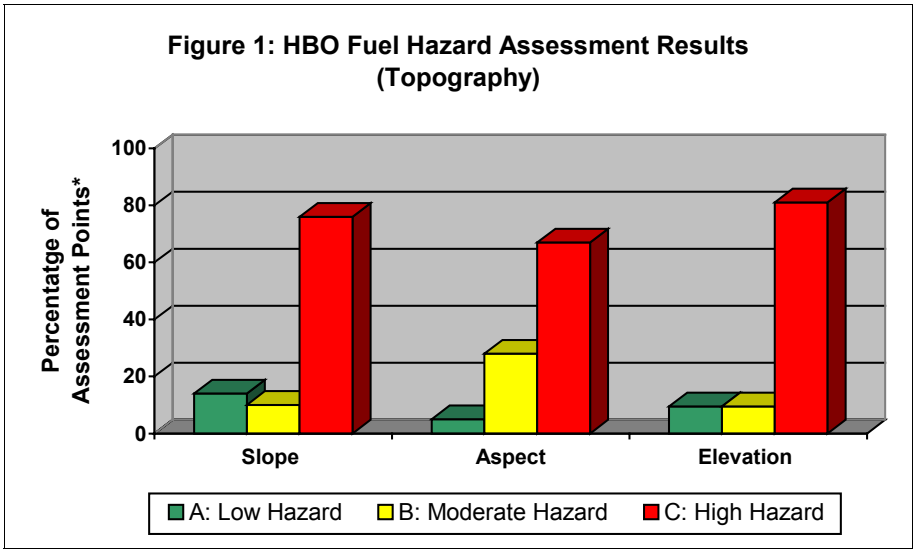
4.2 Summary of the Hazard Assessment Survey

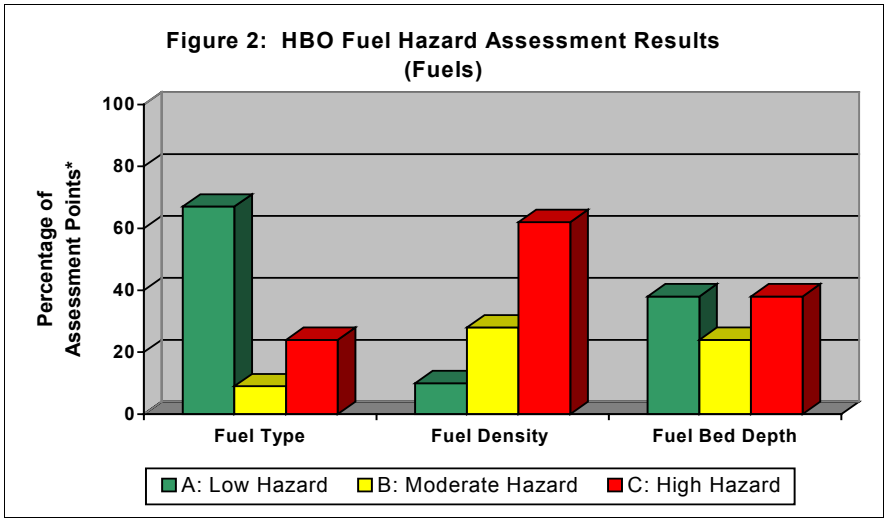
Dynamac Corporation conducted evaluations of the flammable fuels hazards near the wildland interface in the HBO assessment area. Details of the methods used in the fuels survey are presented in Section 7.0 of this document. In brief, locations on or near BLM land were

categorized as to fuel (vegetation) and land characteristics associated with the spread of wildfire. In choosing fuel survey points, emphasis was placed on land near the urban interface that is representative of the features in the surrounding area. The fuel survey assessed 6 variables and rated them as low hazard (Class A), moderate hazard (Class B), or high hazard (Class C). The results are also reported in the Hazard Assessment Report for the HBO assessment area. The results of the fuel and terrain characterizations can be summarized as follows:

- **Slope:**
  - Class A - 14% of the points had flat land (less than 10% slope).
  - Class B - 10% had moderate slopes (10 to 30% slope).
  - Class C - 76% had steep slopes (greater than 30% slope).
- **Aspect:**
  - Class A - 5% of the points had north facing slopes (NW, N, NE).
  - Class B - 28% had east facing or level slopes.
  - Class C - 67% had south- or west-facing slopes (SE, S, SW, W).
- **Elevation:**
  - Class A - 9.5% of the points were above 5,500 feet above mean sea level (amsl).
  - Class B - 9.5% were between 3,500 and 5,500 feet amsl.
  - Class C - 81% were below 3,500 feet amsl.
- **Fuel Type:**
  - Class A - 67% of the points had small light fuels (grass, weeds, shrubs).
  - Class B - 9% had moderate fuels (brush, medium shrubs, small trees).
  - Class C - 24% had heavy fuels (woodland, large brush, ornamentals).
- **Fuel Density:**
  - Class A - 10% of the points had non-continuous fuel beds (<30% cover).
  - Class B - 28% had broken moderate fuels (30 to 60% cover).
  - Class C - 62% had continuous fuel beds (> 60% cover and conductive to crown or surface high intensity fires).
- **Fuel Bed Depth:**
  - Class A - 38% of the points had low fuel bed depths (average < 1 foot).
  - Class B - 24% had moderate fuel bed depths (1 to 3 feet).
  - Class C - 38% had high fuel bed depths (average > 3 feet).

Map 1 shows the locations of all fuel survey points. Data from the fuels hazard assessment are also graphically depicted in **Figures 1** and **2**. The charts depict the percentage of assessment points, based on a total of 21 points surveyed, which received a high, moderate, or low hazard ranking. In general, the data collected for the topographic features indicate that the slope, aspect and elevation are all in high hazard classes. For most of the sites surveyed, the topography is summarized as steep south-facing slopes at elevations less than 3,500 feet amsl. Fuel types, mostly light fuels such as grass and shrubs, are considered a low hazard since the intensity of the fire is low. However, timber is also present north and west of Halfway, and is rated as a high hazard because of the fire's intensity and ability to crown. Fuel bed depths are mixed between all three hazard classes.





* Percentages depicted in Figures 1 and 2 are based on 21 assessment points surveyed.

4.3 Summary of the Structure Assessment (Form 2)

A second component of the Hazard Assessment was to observe the features of structures such as dwellings and other structures of value that can categorize fire resistance. For this survey, Dynamac assessed the one-square mile sections of the assessment area that were within 1 mile of the wildland interface near public land. The data that were gathered characterized for each square mile section structure density, building materials, proximity to fuels, presence of a survivable space, and roads/accessibility. These conditions were classified as low hazard (Class A), moderate hazard (Class B), or high hazard (Class C).

Structure density assessed the number of structures within a section throughout the assessment area. Sections that contain a high density of structures are more likely to be defended from wildfire because of improved infrastructure such as wide roads and water sources than opposed to low-density areas; and as such, were considered a low risk. There were a total 191 sections surveyed and structures were found in 58 sections. Results of the structure survey are summarized as follows:

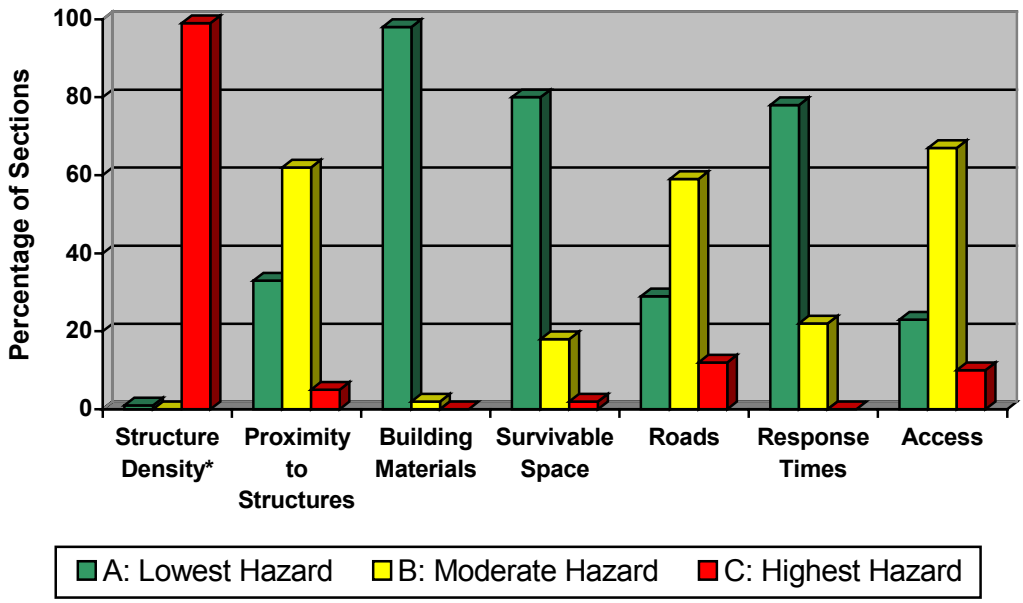
- **Structure Density (based on all 191 sections surveyed):**
  - Class A - 1% of the sections had at least one structure per 5 acres.
  - Class B - 0% had one structure per 5 to 10 acres.
  - Class C - 99% had less than one structure per 10 acres.
- **Proximity to Structures[1]:**
  - Class A - 33% of the sections had flammable fuels 100 feet or more from the structure(s).
  - Class B - 62% had flammable fuels between 40 to 100 feet from the structure.
  - Class C - 5% had flammable fuels < 40 feet from the structure.
- **Building Materials:**
  - Class A - 98% of the sections had a majority of homes with fire resistant roofs and/or siding.
  - Class B - 2% had 10 to 50% of homes with fire resistant roofs and/or siding.
  - Class C - 0% had less than 10% of homes with fire resistant roofs and/or siding.

[1] It should be noted that percentages for all of the following categories are based on 58 sections surveyed *with structures*, as opposed to all 191 sections surveyed in the assessment area, 133 of which had no structures.

- **Survivable Space:**
  - Class A - 80% of the sections had a majority of homes with improved defensible space around the property.
  - Class B - 18% had 10 to 50% of homes with improved defensible space.
  - Class C - 2% had < 10% of homes with improved defensible space.
- **Roads:**
  - Class A - 29% of the sections had wide looped roads that are maintained, paved or solid, surface with shoulders.
  - Class B - 59% had roads that were maintained, but narrow, two-lane roads with no shoulders.
  - Class C - 12% had narrow and/or single-lane, minimally maintained roads with no shoulders.
- **Response Time:**
  - Class A - 78% of sections required 20 minutes or less to respond.
  - Class B - 22% of sections had response times of 20 to 40 minutes.
  - Class C - 0% required greater than 40-minute response times.
- **Access:**
  - Class A - 23% of the sections had structure access with multiple entrances, exits and turnarounds that were all well equipped for trucks.
  - Class B - 67% had limited access routes, with moderate grades, and two ways in and out.
  - Class C - 10% had narrow, dead-end roads, or one-way in and out accessibility, with steep grades.

The percentages of sections that received a high, moderate, or low hazard ranking for the assessment to structures in the assessment area are graphically depicted in **Figure 3.** All percentages in Figure 3 are based on 58 sections surveyed with structures in the assessment area, with the exception of Structure Density, which is based on all 191 sections.

Figure 3: HBO Structure Risk Assessment Results for 58 Sections with Structures



* Structure density percentage is based on all 191 sections surveyed within the assessment area, rather than only the 58 sections with structures.

In general, an assessment of the structures are rated as a high hazard since the density of the homes and structures are spread out making it more difficult for the rural fire departments to respond during wildland fires. Flammable fuels are, on the average, located away from the structures with 95% of sections with structures having fuels greater than 40 feet from the majority of structures. Homes located along the creeks typically had fuels located closer to the structures. Building materials, generally the roof, are constructed of fire-resistant materials such as metal or composite shingles in 98% of the homes observed. In addition, most homes had improved survivable space around them such as maintained lawns or parking areas. Roads, response times and access to structures were mostly rated as low- to moderate-risk for fire department to respond to structures in the assessment area. However, the communities located along the Snake River: Homestead, Oxbow and Brownlee, rely on the Pine Valley Forest Service Ranger Station located in Halfway to respond. Due to the distance and isolation of the communities along Snake River and the difficult canyon road access along Pine Creek, these communities along the Snake River were rated as Class B, requiring 20 to 40 minutes to respond. **Map 2** in Appendix A shows the areas of greatest risk in the assessment area, in terms of fuels and fire suppression.

5.0 PUBLIC CONCERNS AND COMMMENTS

The focus of the community assessment is to determine local needs in terms of ability to combat, guard against, prevent or reduce the risk of wildland fire to the community. During interviews with community officials, the community meeting, and discussions with residents, the public identified numerous concerns and comments. These concerns and comments, if implemented, may reduce the threat of wildland fire to interface areas and improve fire-fighting capability in the HBO assessment area. This section of the Mitigation Recommendations report provides a list of all the concerns and comments that were obtained through community outreach activities.

The suggestions submitted by the community were evaluated to determine if they met the intent of the Communities-At-Risk Program. Comments that fell outside the scope of the program, or comments which did not meet current established policies established by Federal agencies, were not carried forward as a final recommendation in this report. However, these comments were noted in Section 5.1, below, and can be addressed further through community action or local citizen groups if the community feels these issues warrant further action in reducing the risk of wildland fires.

Section 5.2 of this report lists the concerns and comments that Dynamac evaluated as those that are consistent with the scope and intent of the Communities-at-Risk Program. These comments will be carried forward as proposed mitigation recommendations in Section 8.0, Proposed Mitigation Recommendations and Priority.

5.1 List of Public Concerns and Comments Not Analyzed

Not all concerns and comments fall within the scope of the Communities-At-Risk Program set forth by Congress through the National Fire Plan. The funding that Congress has provided for this program is primarily for fuels reduction, community education and rural assistance. The following public concerns and comments have not been carried forward as a mitigation recommendation because they are not within the original intent of the Communities-At-Risk Program, are outside the current policies established by federal agencies, or because they have already been resolved.

- **Improve knowledge of Emergency Operations Plan (EOP).** An EOP exists for Baker County, and is administered by the Sheriff's office in Baker City. This plan, however, is not regularly practiced and the details are completely unknown to the Pine Valley Rural Fire Department (PVRFD). The PVRFD recognized a strong need for an emergency plan, an evacuation plan in particular, in the event of a large fire in interface areas. The PVRFD should work with the Sheriff's Office to not only understand this plan and how to implement it, but to ensure that it would be workable and usable in the event of a conflagration.

- **Convert Homestead Road primitive campsites to day-use areas.** A suggestion was made by a resident of Homestead Road to convert the area into day-use only. This way, even if fires could not be kept to a minimum, they would not remain lit all night long unattended, as currently happens on a regular basis.

- **Improve 911 response.** Some Oxbow residents indicated confusion regarding a resident's ability to report fire ban violators during the fire season. It was explained that 911 should be called, and the appropriate entity would be informed and a dispatch decision would be made. Residents indicated that several 911 calls had been made in the past to report fire ban violators, and that no response from these calls was ever seen.

- **"Natural" fuels treatments along the West Wall.** Fuels treatments are planned for this area; however, these are being conducted through prescribed burns, timber sales and thinning, which were described by one resident as "not natural means". The suggestion was made to use goats to reduce fuels where possible. In addition, residents mentioned that fuels treatments in this area, conducted by the USFS, do not focus on public/private interface areas, and that they would like to see this occur.

Understanding and developing the EOP, converting campsites to day-use areas, and improving 911-response are functions that should be implemented on a county or city level, not through the National Fire Plan. These desired conditions have still been listed because they are critical issues for the community and can be pursued through other funding vehicles, grants or community efforts.

The USFS has already initiated fuels treatment along the West Wall. Much of this has been in the form of thinning forest stands, which could not be carried out by natural means such as goats.

5.2 Public Concerns and Comments Carried Forward

The following list includes the public concerns and comments suggested by the HBO community that are consistent with the intent of the Communities-At-Risk Program.

- **Improve Communications in Oxbow and Brownlee.** Communications within the canyon are not difficult, but communications between emergency officials and their headquarters outside the canyon are almost impossible. A few select locations exist where a line to a repeater can be found, but the majority of the canyon is shielded. This means that firefighting personnel often have to leave the scene of a fire in order to be able to communicate with their headquarters or other responders outside of the canyon. Additional repeaters should be installed, or investment in a satellite communications system should be implemented. This is an issue that has been named as a number one priority by the Hells Canyon Public Safety Committee. Ric Bobier of Idaho Power can be contacted for further information at 541-785-3323.

- **Homestead Road education, fire ban enforcement, and conversion to a day-use area.** Ever-increasing numbers of summer recreational visitors[2] bring trash and fire to the numerous primitive campgrounds managed by BLM along the Snake River Corridor in Brownlee and Oxbow. These fires cause alarm to the residents of the Oxbow area along Homestead Road because, despite the fact that a river flows through the canyon, the area is very dry and windy all summer long. A seasonal fire ban in the area is issued when conditions are warranted; however, enforcement of the ban is sporadic. There is a need for increased patrols in this area during summer months, enforcing the fire ban, and instituting fines for violators of the fire ban. Below are pictures, taken in 1997 by a local resident, indicating the heavy use in the area, unattended fires, and the surrounding vegetation in close proximity to the firesites. Note the dense fuels leading up to the home in the top, left corner of Picture 1.

[2] Idaho Power, as part of its re-licensing process, has compiled 7 years of statistics indicating that usage of campsites along Homestead Road is very high.

Picture 1

Picture 2

Picture 3

Residents suggested that maintained fire pits be installed in safe locations, which would greatly reduce the threat of fire spreading outside the designated areas. However, it was one resident's contention that 'better fire pits make better garbage cans' and that installing fire pits would only add to an already large problem of garbage disposal. In addition, installing fire pits would move these campsites out of the category of 'primitive'; something that is an attraction to many recreational visitors.

Residents also mentioned that educational efforts should be instituted regarding specific types of vegetation that should not be cut down to use for firewood. There is already a limited supply of woody plants in the area, and recreational visitors who use them for

firewood are having a significant impact on plant life. In addition, education regarding the dryness of the area, and prevailing winds during fire season is needed.

- **Inform homeowners of risks in person.** In 1994, a fire truck went to every home on USFS interface areas and told homeowners which category their home fell into: defensible, marginal, or non-defensible. This caused several homeowners who were categorized as non-defensible to take action. Unfortunately, the information that was gathered from this outreach has been lost. A grant to do this on all interface land would serve this area well. United Community Partners could be trained, or the PVRFD could be contracted to conduct the outreach on weekends.

- **Provide financial aid to homeowners for fuels reduction.** If a homeowner received $500 to clean the area around their home, this would certainly encourage many homeowners to act that have not in the past. Clearing efforts can sometimes be costly and financial restraints serve as a roadblock to conducting this very effective preventative maintenance.

- **Develop a small Rural Fire Department in Oxbow.** A significant problem in terms of wildland fire in Baker County is unprotected lands. As indicated by Mark Bennett, Director of Planning and Emergency Management for Baker County, there are large portions of wildland that are prone to fire and are not protected by a rural fire district. The developed areas of Brownlee and Oxbow fall into this category. First response is critical to containing a fire before it becomes a greater danger. Under ideal conditions, the current response time from the PVRFD in Halfway is 15 minutes and BLM can have a command vehicle in 1 hour with a BLM heavy engine in 1.3 hours. If volunteers could be found that would be willing to undergo and maintain necessary training, money could be available through state and federal agencies to fund it. In addition, the PVRFD indicated it would be willing to enter into mutual aid agreements and undergo training with this fire department. Ric Bobier of Idaho Power indicated that initial interest in a small local fire department might be high, but that maintaining the training would be difficult. Initial interest was likely to fade due to low fire occurrences in the area. He also indicated, however, that Idaho Power would be open to providing incentives for employees to volunteer, such as doing training on company time. The ODF has helped organize RFDs in other areas of Oregon, and a list of Action Items to form an RFD is included in **Appendix B**. This list is part of the Oregon Revised Statutes.

- **Obtain wildland fire equipment and training for PVRFD.** This department has adequate equipment to fight structural fires, but not wildland fires. It currently owns a light-duty four-wheel-drive truck that has the ability to be a first response vehicle. Because of higher demands in the town this truck is equipped with extrication equipment. In the event of a wildland fire, the extrication equipment is removed and wildland fire fighting equipment loaded, thus making the response time to a wildland fire significantly longer. In addition, this department will not respond to fires outside its district for fear of abandoning its own responsibilities. If another light-duty truck were obtained, and outfitted with wildland equipment such as a portable slip-in pumper, wildland fire risk in the area would be greatly reduced.

  Another equipment need of the PVRFD is radios. The typical life span of the radios used by the department is four years. Six years have passed since the PVRFD obtained the radios it currently uses. There are not enough radios and those the department has are not reliable. Communications are particularly important when combating a wildland fire; therefore, obtaining new radios should be considered a priority for this department.

  Besides equipment, wildland training for the PVRFD is also lacking. Five of ten men have been trained through ODF in wildland firefighting. Training meets National Fire Protection Association (NFPA) training requirements, but not National Wildfire Coordination Group (NWCG) requirements.

- **Fuels treatment in Brownlee and Homestead.** Ric Bobier mentioned that Brownlee does not have a road acting as a firebreak along its west side, such as the road present behind the Oxbow village. A firebreak on public land may serve to better protect Brownlee. In addition, homes along Homestead Road have 'fine fuels', or annual weedy species that have caused concern to residents there. Residents of Oxbow indicated interest in participating in prescribed burning in the area around their homes to reduce the fuel load and to encourage native species to recover.

- **Education along the 'West Wall'.** This area has already received a great deal of attention regarding fuels treatments by the USFS. In addition, however, educational outreach to these residents along the interface area would provide additional risk mitigation.

- **Have a Firewise Clean-Up / Fire Education Day and Barbecue.** Dedicate one Saturday a year to community fire education, have state and Federal agencies host or participate in a barbecue, provide training and educational materials during the barbecue, and dedicate the rest of the day to physical clean-up work. Idaho Power village residents could possibly assist in cleaning up the yards of non-village residents such as those along Homestead Road.

- **Utilize ditches on Pine Valley Ranch (PVR) for firebreaks.** Grasslands at the base of the hills on the south and east sides of Halfway are very dry in the summer. Many ditches exist between the base of these hills and the grassland, but they are overgrown and full of fuels. If these ditches were maintained and treated as brownstrips or greenstrips, significant economic value in the PVR would be protected against wildland fire risk. Mitch Hoover, former ranch manager for PVR recommended planting shrubs, possibly bitterbrush, which stays green throughout the summer and is already established in many areas on the PVR, along the ditches. The ditches could then serve as adequate firebreaks.

- **Install ponds along East Pine Creek and Clear Creek.** Very little water runs through these creeks, making them useless as a water source to aid in fire defense. Residents suggested that if the streams were dammed to form ponds, it would allow helicopters to dip buckets and fire trucks to use pumpers to fill their tanks.

6.0 NEED FOR ACTION

Wildland fires in the HBO assessment area are not common to date, but the risk is high. At risk are dwellings and other structures on private land near the wildland interface, cultural, environmental, and historic resources, and several economically valuable businesses.

To reduce the hazards of wildfire in the assessment area, both general and specific actions are needed. In general, the residents and their local, state and federal agencies must support activities that promote safety for dwellings and structures at risk. Federal agencies should coordinate efforts to achieve fuels management programs aimed at decreasing the spread of wildland fires from public lands onto private lands and vice versa.

More specifically, effective first response capabilities are severely lacking or nonexistent in the HBO assessment area. This is a reflection of the fact that most rural fire departments have traditionally been structural firefighting entities, and are only now beginning to combat wildland

fire seriously. The USFS and BLM do have good response capabilities, but the USFS has only one truck stationed in Halfway, and BLM's closest response is from Baker City. These facts alone indicate a definite need for first response improvement.

Residents within this assessment area are aware of the great fire hazard surrounding them, and want to see precautionary measures defined, and actions taken to implement them.

7.0 METHODOLOGY

The assessment activities that are used to determine the proposed mitigation recommendations for the HBO assessment area are based on information acquired from a survey of the hazard of wildland fire through field surveys, information obtained from the community meetings, and interviews of public officials. The majority of information presented in this report was gathered between November 26 and December 7, 2001. The Hazard Assessment Report has been completed for the area and is available at the BLM Vale District office.

Dynamac characterized land and fuels at 21 points on public land within a 15-mile radius of HBO, concentrating on sections of land near inhabited areas. As not all sections of public land were accessible, Dynamac endeavored to choose fuel survey points that were representative of surrounding sections; in areas identified as having high potential for fire starts or that appeared especially likely to carry or spread a fire; areas where fires have occurred in the past; or based on fuel types. The rating elements included slope, aspect, elevation, fuel type, fuel density, and fuel bed depth, and were assigned to a hazard rating of low, medium, or high (See Hazard Assessment Report, Table 3, and Appendix B).

At each survey point, the field crew recorded the location in UTM coordinates using a Trimble® hand-held global positioning system unit (GPS), and photographed the surrounding area in the four cardinal directions. Also, a wildland fuels fire hazard assessment form (Form 1) was completed which rated the characteristic of the land features and fuel sources.

Dynamac staff also collected information on the flammability and defensibility of structures on private land from over 191 sections located within one mile of public lands, within the assessment area. The structural hazard assessment rated the structures based on the resistance of building materials to fire, and the distance of flammable fuels to the structures located within a section. The rating elements included structure density, proximity of flammable fuels to the

structures, building materials, defensible space, and types of roads, response times, and accessibility. Each element was assigned a hazard rating of low, medium, or high (See Hazard Assessment Report, Table 4, and Appendix C).

A community meeting/open house was held on December 6, 2001, at the Halfway Elementary School Library from 6:30 to 8:00 p.m. The community was invited to attend through newspaper articles in the Hells Canyon Journal, announcements posted in public places such as post offices, local restaurants, the bank, and telephone poles. Flyer-invitations and surveys were mailed to area residents. Approximately 600 mailer invitations were sent out prior to the meeting. Twelve residents were in attendance. Dynamac, BLM, and USFS staff conducted the public meeting to hand out firewise brochures, obtain information from the community on hazardous fire situations and to be an informational resource to those attending the meeting. Introductions and explanations of the project were given, and all attendees were invited to introduce themselves and voice any comments or concerns. Residents attending the meeting were also asked to fill out a survey form regarding their perceptions and concerns about wildland fire in their communities. Several of these were also received from people that did not attend the meeting. (See Hazard Assessment Report, Appendix D).

The Dynamac Community Relations Specialist conducted interviews with numerous local public officials and residents. Individuals or groups interviewed included local residents, the Pine Valley Ranch, the USFS, United Community Partners, the Mayor of Halfway, Idaho Power, Pine Valley Rural Fire Department, and Friends of Brownlee (See Hazard Assessment Report, Appendix E). A Dynamac Community Relations Specialist explained our position as contractors with BLM, provided background information on the project, including a map of the assessment area, and asked questions to obtain information for the community profile.

A second community meeting was held on March 7, 2002 to present the draft results of the HBO Hazard Assessment and Mitigation Recommendations. Comments obtained from the meeting were reviewed and incorporated into this final report.

8.0 PROPOSED PROJECTS AND PRIORITY

The following general action items and projects were identified by and extrapolated from the list of public concerns and comments set forth by the community to reduce the hazard of wildfire in

the HBO assessment area. A more specific explanation of each topic follows. Each of these actions falls under the intent of the Communities-At-Risk Program:

- Develop community education and outreach programs throughout the assessment area to encourage firewise practices;
- Expand the fuels reduction regimen to decrease fire risk to residential and economically or environmentally valuable areas; and,
- Provide assistance to the residents of Oxbow and Brownlee in forming a first response crew and the PVRFD in obtaining funding for additional equipment and training.

8.1 Community Education and Outreach Recommendations

Education has been defined as the number one priority for the HBO assessment area because education is preventative and, if carried out properly, will more effectively reduce the risk of wildland fire spreading to developed areas than other mitigation techniques. If every citizen understands the risks and takes proper steps to guard their own home and property, enormous risk of loss will be eliminated before any firefighting entity, or proper firebreak is needed.

Under the umbrella terms of education, outreach, and training, the following are three specific actions Dynamac has carried forward as mitigation recommendations:

1. Annual Firewise Clean-Up Day Barbecue;
2. Recreational visitor education along Homestead Road; and
3. Targeted outreach along the 'West Wall' and other high-risk areas.

8.1.1 Annual Firewise Clean-Up Day Barbecue

Initiating an Annual Firewise Clean-Up Day Barbecue is an excellent tool to encourage residents to come together and learn about the creation of defensible space, firewise landscaping, and even help each other accomplish some of the firewise activities. Demonstration projects such as landscape design and building material workshops or a small firewise home demo can be designed and utilized in conjunction with guest speakers on wildfire and firewise practices. Also on this day, training sessions for local fire department and first response crews could be held to keep them up to date on all NWCG training requirements. This event's popularity could easily be bolstered with the inclusion of food on the list of offerings to the public.

Community-wide firewise-education programs should focus on these issues: 1) educate the public of the dangers of wildfire in the area; 2) urge residents to take responsibility in reducing the risk of wildfire and to create defensible space around their residence; and, 3) increase awareness of the natural role of low-intensity fire in woodland or grassland ecosystems while emphasizing the necessity for prescribed burns and/or the justification behind occasionally managing wildland fire to achieve ecological benefit, while maintaining firefighter and public safety as the number one priority. The public education and outreach program could be co-sponsored by the BLM, ODF, USFS, and RFDs through a partnership agreement.

8.1.2 Recreational Visitor Education

Recreational use on public lands, especially during periods when the risk of wildfires is high, has concerned many residents in the Homestead Road area. Fine dense fuels (grasses and shrubs) are heavy in the Snake River Corridor, and summer months are hot, dry and windy: ideal conditions for fire. Recreational visitors do not understand the severe fire hazard in the canyon and have been known to leave fires burning unattended all night long. In addition, recreational destruction of the limited woody plants for firewood impacts the plant life in the area and also decreases its aesthetic value.

Some fire danger notification signs are already present in the area, but these signs contain fine print and need to be more explicit. Official signs should be posted identifying public land, fire hazards associated with the land, the need to preserve area plant life, and a telephone number to call to report fire ban violations. In Idaho, signs are posted along the roadway indicating #FIRE as a number to call, and these could be instituted in Oregon, as well.

The use of public announcements in cities such as Ontario, Boise, and Baker City to advise the public of the fire hazards could prove highly effective. A message from the Governor or another well-known and respected figure would have a significant impact on increasing public awareness.

8.1.3 Targeted Outreach in High-Risk Areas

Several high-risk areas have been identified in the HBO assessment area through the field assessments and information obtained during interviews. The high-risk interface areas include:

1. The Snake River Corridor where the villages of Brownlee, Oxbow, and Homestead are located;
2. West Wall (west of Halfway,) where housing density is high along the wildland interface; and
3. The National Forest lands north of Halfway where housing density is high along the wildland interface.

The area's RFDs would be more successful at defending homes in the interface zone if the homeowners were better educated about the risk of wildfires, and were encouraged to implement firewise practices. The state and federal agencies could assist with this proposed mitigation action by providing literature, organizational oversight, partnerships with local officials and volunteer organizations, and loaning equipment, such as a mobile chipper and a debris hauler.

Outreach conducted in 1994 along the USFS interface proved very effective. Firemen conducted door-to-door surveys of homeowners and determined if their house would be considered defensible, marginal, or non-defensible during a wildfire. As a result of the survey, many residents took actions to protect their homes so that it would be 'defensible' in the event of a wildfire. Information collected from this outreach has unfortunately not been saved. However, this type of outreach could be conducted along all public boundary interface areas, not just the USFS interface. The PVRFD could work in conjunction with the USFS, BLM and United Community Partners to obtain proper educational materials to hand out to homeowners while providing individual assessments.

Project Necessity: Citizen and visitor knowledge about and involvement with wildfire mitigation in and around communities is a necessary element for success. Public education and outreach is an effective means of engaging the public in the process of reducing risks to a community. Such education and outreach has been shown to motivate homeowners to take measures around their individual property, thereby contributing to the reduction of wildfire hazards in a community. Furthermore, the above described community education and outreach program will help identify problems and solutions for both public and private landowners, and offer opportunities for partnerships and agreements. Implementation of the program, and appropriate action by federal agencies as well as homeowners, will reduce fire risk to structures in the HBO assessment area.

Project Timing: The annual "Firewise Clean-Up Day", radio news announcements, public demonstrations, sign postings, and targeted outreach into high-risk areas would be most effective in the spring. This will remind people to prepare their properties for the coming fire season, and will remind visitors of the hazards associated with a high fire risk area. Due to the geographic separation between Halfway and the villages along the Snake River Corridor, it may be necessary to have more than one Firewise Clean-Up Day.

8.2 Fuels Reduction Recommendations

Purpose of Fuels Reduction: The hazard to the community from wildfire on public lands in the HBO assessment area is high. The large areas of public lands adjacent to private properties put residents at risk. Fuels reduction has been shown to be effective around communities to reduce the risk of fire in the wildland-urban interface. A good assessment of specific hazards and threats to a community will help identify problems and solutions for both federal and private landowners, and offer opportunities for partnerships and agreements. Treatments will aid in reducing the wildfire threat and risk of loss to existing values in the vicinity of the most hazardous fuels.

Types of Fuels Reduction and Treatment: In general, mitigation measures appropriate to reduce wildland fire risk include commercial and non-commercial mechanical fuel removal, controlled burns, and maintenance of treated areas. The USFS has limited interface risk through these types of actions, which has become evident through several past and planned fuels treatment projects. The general issue remaining, however, is reducing fuel loads on certain public and private lands that have not received as much attention in the past. Three specific fuels reduction projects being carried forward as mitigation recommendations are as follows:

- Convert border ditches on the PVR to firebreaks;
- Fuels treatment in the Brownlee and Homestead areas; and
- Provide financial assistance to homeowners for fuel reduction.

A significant amount of land to the south and southeast of the town of Halfway comprises the PVR. Much of this land is grazing lands at the base of hills and is composed of dry grassland (bluebunch wheatgrass and cheatgrass) with shrubs (sagebrush and bitterbrush) that pose a significant fire risk during fire season. The manager of the PVR indicated that many ditches already exist along the border of this land near the base of the hills, but that these ditches are

severely overgrown posing additional risk to the area. These ditches could be treated, by means of brown stripping, green stripping or mechanical fuel reduction to act as fuel breaks.

This ranch has not traditionally been concerned with fuels treatments or any other fire risk mitigation actions. Because of the recent change in ownership, however, as well as significant improvements of economic value to the owners of the PVR, and potentially to the town of Halfway, the new management of the PVR indicated interest in conducting fuels treatment to reduce the hazards posed to it by wildland fire.

Fuels treatments in the Brownlee and Homestead areas are particularly important due to the long response time by the PVRFD and lack of a first response crew in this area. Oxbow Village has the benefit of a road extending behind the community between itself and major wildland fuels, which acts as a firebreak. Brownlee Village does not have this firebreak, and is even further away from response crews. Therefore, a firebreak is recommended for installation behind the Brownlee Village to decrease risk of loss, to allow extra time for evacuation, if necessary, and to allow extra time for fire fighting entities to arrive and combat the fire properly.

Several homeowners along Homestead Road are concerned about the fire risk and would like to participate in fuels reduction programs in cooperation with the ODF, USFS and BLM. Fine, dense fuels (grasses and shrubs) exist in this area, and are in close proximity to homes on steep slopes. These homeowners would benefit greatly from combined education and fuels reduction on their own and nearby public lands.

Providing financial assistance to homeowners for fuels reduction is a viable recommendation. However distribution of the funding may not be directly to homeowners. The Hazard Assessment Report has defined general high-risk areas on which the mitigation recommendations in this report are based, but has not identified risks to specific homes/landowners. Several programs for providing financial assistance to homeowners for fuel reduction may include the following: an ODF program that involves cost sharing for fuels reduction projects; providing community assistance; federal or state agencies loaning equipment such as a mobile wood chipper and debris hauler to the community to assist with disposal of debris; assisting with an annual firewise cleanup day; or, conducting assistance through an organization such as the United Community Partners to provide community assistance by assessing private landowner's property and assisting with fuels removal.

Map 3 shows the locations of the proposed high-priority areas for fuels reduction. Planting herbaceous firebreaks, or green strips, along the interface area would reduce the spread of wildland fires into the community.

Project Necessity: Fuel removal and reduction will reduce the danger of fires escalating to uncontrollable levels. This treatment will help to protect structures and agricultural/rangelands by lowering the risk fires pose, and by making fires easier to suppress.

Project Timing: BLM generally times projects in the following manner: Year One is the year identification and justification of projects occurs and treatment objectives are determined. Field surveys begin. In Year Two, projects that require compliance with the National Environmental Policy Act (NEPA) are planned, analyzed, and designed. In Year Three, NEPA projects begin implementation. All steps are contingent on available funding. In Year Four, post-treatment monitoring begins.

8.3 Rural Assistance for Fire Departments

Four main improvements are proposed as mitigation recommendations under the heading of Rural Assistance as follows:

- Develop a small rural fire department or first response crew in Oxbow;
- Improve communications in Oxbow and Brownlee;
- Obtain wildland fire training, radios and other equipment for the Pine Valley RFD; and
- Install ponds along East Pine Creek and Clear Creek.

8.3.1 Oxbow Fire Department/First Response

A rural fire department or at least a first response crew should be established in the Oxbow area. The Oxbow and Brownlee areas fall under the category of unprotected lands in Baker County. Therefore, no fire department or first response team exists to protect them. These areas are drier in the summer than nearby Halfway and have longer response times due to the distance from emergency response entities. First response is critical to containing a fire before it becomes a greater danger. Representatives of Idaho Power indicated that the company might be open to providing incentives for employees to volunteer for such an organized response crew, such as allowing training on company time. The ODF has helped organize RFDs in other areas of Oregon. That agency could be contacted to begin the process for this department as well; a list

of action items to form a rural fire department, set forth by Oregon Revised Statutes, is included in Appendix B. In addition, the Pine Valley RFD indicated it would be willing to enter into mutual aid agreements and conduct and participate in joint training activities if a fire department were to be formed in Oxbow.

8.3.2 Communications Improvements in Oxbow and Brownlee

Troy Hale, the Baker County Sheriff, defined communications in the canyon as the number one problem regarding emergency response and wildland fire defense. Communications are not usually difficult while crews and responders are in the canyon, but attempting to navigate out of the canyon requires emergency response personnel to find one of only a few select locations where it is possible to reach a repeater. Additional repeaters are needed to allow emergency response teams to communicate with one another. This issue has been named as a priority for the recently formed Hells Canyon Public Safety Committee, but no progress has been made on it so far. Efforts to solve this problem should be coordinated with this committee. Ric Bobier of Idaho Power can be contacted for further information, at 541-785-3323.

8.3.3 Pine Valley RFD Assistance

Traditionally, area fire departments have focused primarily on structural fire fighting. Training, equipment and experience are therefore significantly limited to structural defense capabilities. Only recently have rural fire departments begun to branch out into wildland firefighting. The Pine Valley Rural Fire Protection District is not part of the Snake River Valley Fire Protection district and will not benefit from the wildland fire training grant won recently by that district. This makes training as much of a need as equipment and experience for this district. In addition, Mark Bennett, Emergency Management Director for Baker County, identified the PVRFD as one of seven RFDs in Baker County in dire need of assistance.

The efficiency and effectiveness of the PVRFD would be enhanced and response times shortened by the addition of the following equipment:

- A light-duty four-wheel drive truck outfitted with wildland equipment; and
- New radios.

The PVRFD already has one light-duty, four-wheel drive truck that could be used as an adequate first response vehicle, but because of greater demand for extrication response in town, this

vehicle is equipped to respond to accident scenes. If this truck were needed for a wildland fire, all extrication equipment would have to be emptied and the truck re-loaded with the proper equipment, severely hindering response time. If this department obtained an additional off-road truck and equipped it with proper wildland fire fighting equipment, the department would have significantly improved response times. In addition, this department's area of coverage and willingness to go to interface areas would increase because it would have the capability of leaving one truck in town and taking one into outlying areas when necessary.

Currently, radios used by this department are unreliable and there are not enough for fire fighters. The life expectancy of such radios is only four years; this department has been using its radios for over six years. Communications are a crucial element to wildland fire defense; without knowledge of where other members of a crew may be, or input from other entities as to where the fire itself is, effective fire fighting is not achieved and lives are placed in danger.

In addition to equipment, the Pine Valley RFD needs additional wildland fire defense training. A NFPA or NWCG-certified instructor should conduct wildland fire training during the winter (when fire season is slow) locally at a rural fire department to teach the wildfire-fighting courses. Basic wildland fire training courses meeting NWCG standards are recommended. These include S-130, S-190, and the Standards for Survival classes.

8.3.4 Pond Installation

Clear Creek and East Pine Creek are small creeks that generally do not have a good and constant supply of water running through them. If a fire were to come through this area, fire trucks wanting to replenish tanks or a helicopter needing to dip a bucket to aid in fire defense from these creeks would not find enough water present. It is therefore recommended that retention ponds be installed along these creeks in areas where they may be the most useful to the Pine Valley and other fire fighting entities. The decision on pond placement should be coordinated between all relevant fire fighting entities.

Project Necessity: Approximately 76 percent of the land within the HBO assessment area is public land. Public lands surround Halfway and intermix with Oxbow and Brownlee developments. The ability to respond quickly to remote areas, having an adequate water supply, and the ability to communicate once at the scene, each are critical for rural fire departments when responding to wildland fires.

Project Timing: These recommendations do not fall under any timing requirements. The state and federal agencies could assist the Pine Valley RFD and interested Oxbow volunteers in obtaining grant money as soon as time and funding permit.

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Video: Firewise Landscaping, Part 3-Maintenance.

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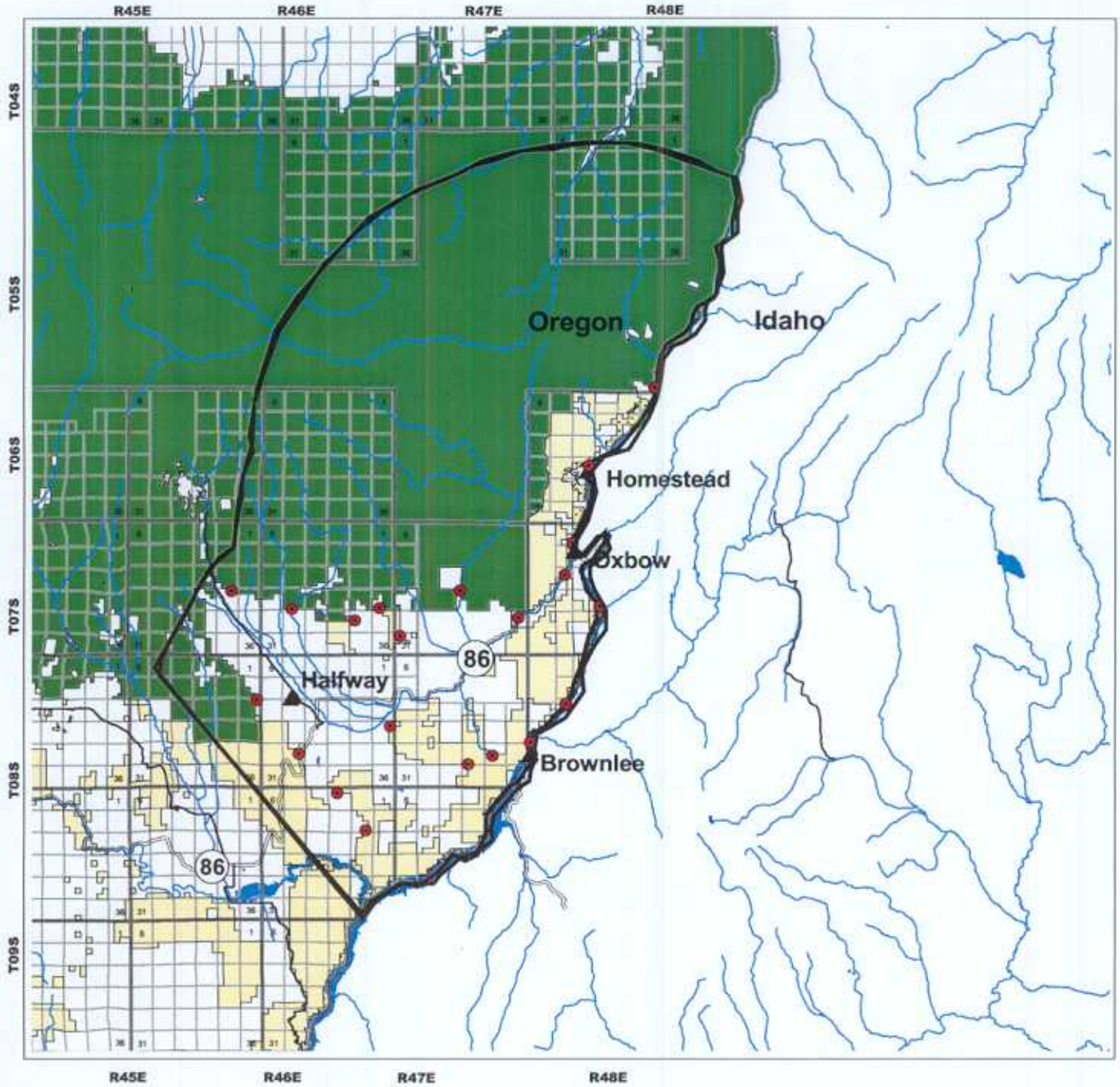
Appendix A:
Maps

Map 1: HBO Assessment Area and Fuel Survey Points



N

2 0 2 4 6 8 Miles

Scale 1:350,000

Ownership:

- BLM
- U.S. Forest Service
- FERC
- Private
- Assessment Area
- State Highway
- Stream
- Surface Water

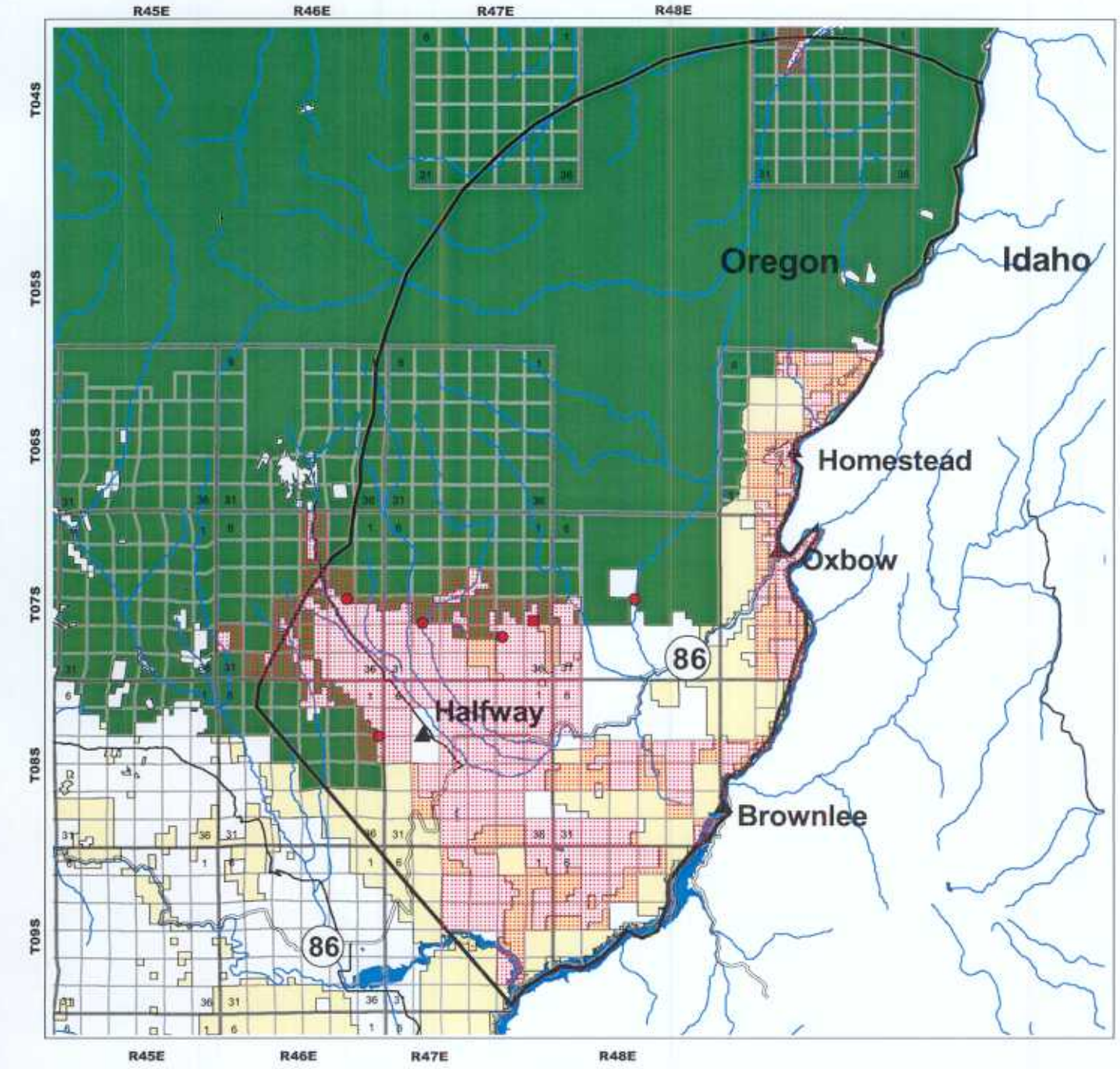
Actual Assessment Points

No warranty is made by the Bureau of Land management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

DYNAMAC CORPORATION
Environmental Services

Map created by April 2002

Map 2: Highest Risk Areas for Fuel and Fire Suppression within the HBO Assessment Area



N

2 0 2 4 6 8 Miles

Scale 1:350,000

Ownership:

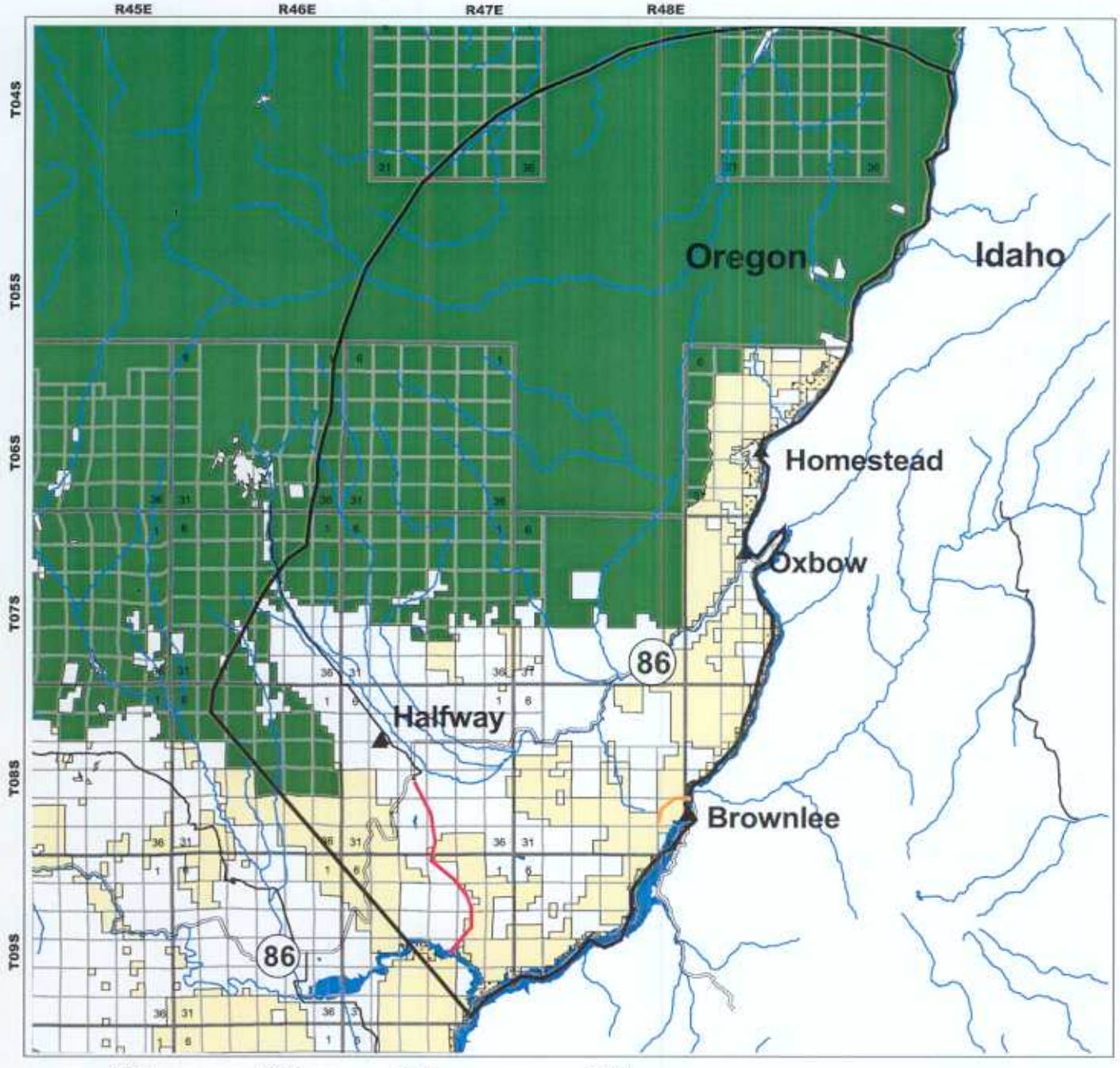
- BLM
- U.S. Forest Service
- FERC
- Private
- Assessment Area
- State Highway
- Stream
- Surface Water

- Highest Risk to Fire Suppression Areas (Low Structure Density) within the Assessment Area
- Highest Risk Fuels Areas within the Assessment Area
- High Risk Fuel Areas within the Assessment Area

DYNAMAC CORPORATION
Environmental Services

Map created by April 2002

Map 3: Proposed Mitigation Recommendations in the HBO Assessment Area



N

2 0 2 4 6 8 Miles

Scale 1:350,000

Ownership:

- BLM
- U.S. Forest Service
- FERC
- Private
- Assessment Area
- State Highway
- Stream
- Surface Water

Mitigation:

- Fire Break along Sag Road
- Fire Break behind Brownlee Village

DYNAMAC CORPORATION
Environmental Services

Map created by April 2002

Appendix B:

Action Items Required to Form a Rangeland Fire Protection Association

ORS 477.320 and 477.325

ACTION ITEMS REQUIRED TO FORM A
RANGELAND FIRE PROTECTION ASSOCIATION
ORS 477.320 & 477.325
REVISED: 20 APR 00 FILE: RFPA FORMATION

Rangeland owners write letter to Board of Forestry requesting formation of a RFPA.
Responsible party: Rangeland owners

Board of Forestry acknowledges rangeland owners request via letter and appoints a local Department of Forestry contact.
Responsible party: Salem Fire Staff

Board of Forestry agenda item is requested regarding formation of requested RFPA.
Responsible party: Salem Fire Staff

Board of Forestry orders the holding of a public hearing into the formation of a RFPA.
Responsible party: Board of Forestry

Date, time and location of the public hearing are arranged.
Responsible party: Salem Fire Staff, District and RFPA

Board of Forestry public hearing officer is appointed.
Responsible party: Salem Fire Staff

Board of Forestry public hearing is scheduled; time and place are determined.
Responsible party: Salem Fire Staff and District

News release about Board of Forestry public hearing is issued.
Responsible party: Salem Fire Staff and Salem Public Affairs

Local notice is given about Board of Forestry public hearing.
Responsible party: District

Board of Forestry public hearing is conducted.
Responsible party: Salem Fire Staff

Board of Forestry public hearing records are filed.
Responsible party: Salem Fire Staff

Board of Forestry agenda item is requested regarding formation of requested RFPA.
Responsible party: Salem Fire Staff

Board of Forestry authorizes the formation of the requested RFPA.
Responsible party: Board of Forestry

Bylaws of the RFPA are developed.
Responsible party: Rangeland owners

Draft Memorandum of Understanding is developed to define the extent and type of protection to be conducted by the RFPA.

Responsible party: Salem Fire Staff, District and RFPA

Memorandum of Understanding, which defines the extent and type of protection to be conducted by the RFPA, is signed.
Responsible party: Salem Fire Staff, District and RFPA

Develop and sign a Mutual Aid Agreement between the District and the RPFA.
Responsible party: District and RFPA

Facilitate acquisition of FEPP equipment by RFPA.
Responsible party: District and RFPA

Facilitate acquisition of VFA federal grant funds by RFPA.
Responsible party: Salem Fire Staff

Develop first budget and forward to Board of Forestry.
Responsible party. RFPA

Board of Forestry agenda item is requested regarding RFPA budget.
Responsible party: Salem Fire Staff

Board of Forestry approves RFPA budget.
Responsible party: Board of Forestry